

In this paper Paul Millar outlines the development of the University of Canterbury Quakebox project, a collaborative venture between the UC CEISMIC Canterbury Earthquakes Digital Archive and the New Zealand Institute of Language Brain and Behaviour to preserve people's earthquake stories for the purposes of research, teaching and commemoration. The project collected over 700 stories on high definition video, and Millar is now looking at using the corpus to underpin a longitudinal study of post-quake experience.

Tell Me More: Sharing Our Stories

National Oral History Association Conference 2016

21-23 October, Commodore Airport Hotel, Christchurch

Saturday 22 October

10.45-12.00 Session 2 Chair Ann Packer

The development of Turnbull Library's oral history collection Linda Evans

The Quakebox: A container for postquake oral history Professor Paul Millar

Six Iwi, One House Taina Tangaere McGregor



In May 2011 I submitted a proposal to develop the UC CEISMIC Canterbury Earthquakes Digital Archive to collect images, stories and media related to the Canterbury Earthquakes for the purposes of commemoration teaching and research.

**THE SEPTEMBER 11
DIGITAL ARCHIVE
CONTAINS OVER
150,000 ITEMS**

- Stories
- Emails
- Documents
- Images
- Digital Animations
- Interviews
- Audio/Video



The plan was to build a cultural heritage disaster archive modeled on the 9/11 Digital Archive, which had collected 150,000 digital objects related to the 9/11 attacks.

CEISMIC Developed into a unique consortium of organisations committed to the development of a national federated earthquake archive for commemoration, teaching, research and cultural heritage preservation.

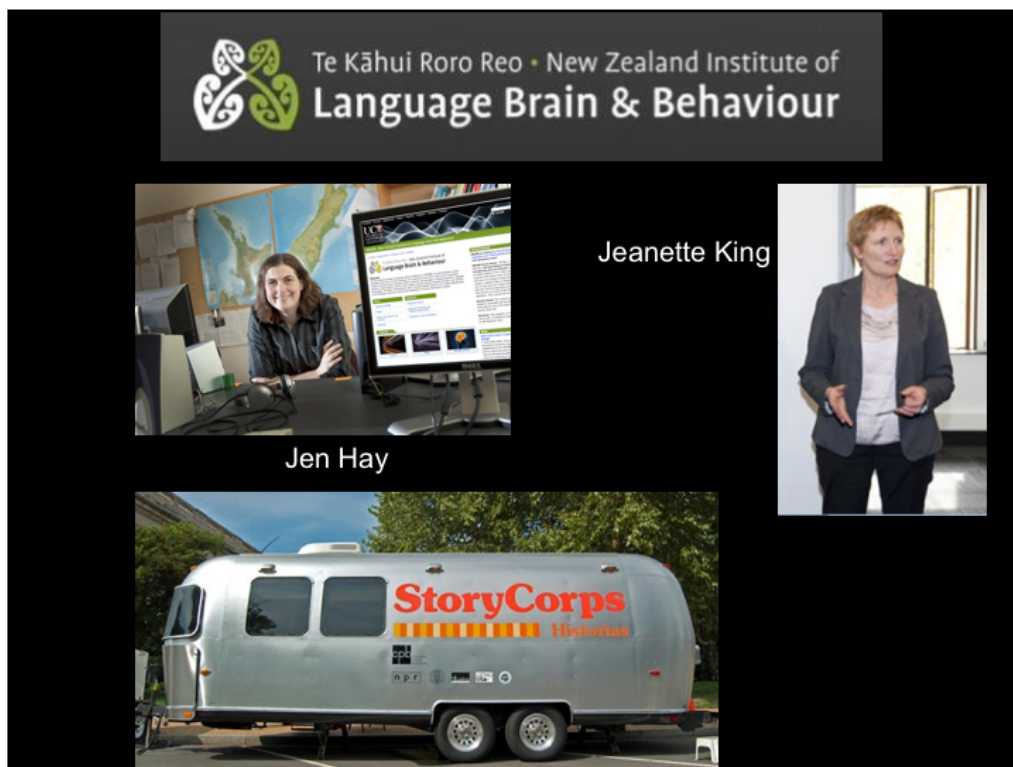


Over the last four years we've built CEISMIC into one of the largest archives of its type in the world, with over 300,000 items collected by a federated consortium, at the heart of which is UC's own QuakeStudies repository, managed by a committed and talented team of people in the UC Arts Digital Lab.

Of CEISMIC's many sub-collections, probably the most challenging and rewarding to develop has been the Quakebox project to send a container equipped as a recording studio to some of the hardest-hit areas of greater Christchurch to collect people's stories.

What I'm about to tell you may make a number of the experts in oral history shudder. This is in many ways an accidental corpus, less planned and more organic than would be ideal. As you'll learn, we're still making things up as we go along. But in that regard, it reflects a lot of our experience here since the earthquakes, and I think its greatest value to us may end up deriving from the messy, dynamic and organic nature of

its creation.



The Quakebox project began with a low-key conversation I had with Professor Jen Hay and Associate Professor Jeannette King of UC's Linguistics research facility, the New Zealand Institute of Language, Brain and Behaviour. We were talking about how we needed a facility like Storycorps to get out on the road and collect first-hand earthquake stories while they were still fresh. Jen and Jeanette wanted the stories for a linguistics research project on how people talk about disasters and traumatic experiences, including voice and gesture analysis. I simply wanted the stories because I had discovered from my own experience that every person's story is different, and each is important. Given that our ethos from the start was that every item collected by CEISMIC should be repurposable, this project allowed a corpus developed for a specific research purpose to become a searchable archive and resource for a variety of other purposes



We began pricing mobile recording studios, and discovered they were horrendously expensive, particularly because the NZILBB needed to record in high definition, with full soundproofing and quality lighting. Somehow, I heard of a Tourism New Zealand project to record tourist stories around the country and promote NZ tourism through YouTube. When I contacted them, it turned out the project was now over and their converted container, which featured a grotesque extruding Tui's nest, was in mothballs. After some friendly negotiation, TNZ gave us the container (minus the truck) if we paid to freight it down to Christchurch.



Once we received it, we fully out-fitted it, named it the Quakebox, and sent it around Christchurch to interview people.

To date we've recorded 723 stories in 13 different languages.

It was as simple as that!



Only it wasn't that simple. We faced numerous obstacles, most of them bureaucratic and of the pettiest nature, including requiring us to change all the lining because although it was evidently fire-proof to the highest quality, TNZ didn't have the original paperwork. At one stage the City Council was going to require us to build new concrete foundations every time we moved the studio, despite there being many thousands of other shipping containers standing safely on their own bases etc. The full burden of getting the Quakebox fit for purpose and on the road fell on the shoulders of our most excellent project manager—Liz Grant. [SLIDE Click] Liz is one of the real heroes of this story. Without her the Quakebox might well not have happened. The daily and hourly frustrations and setbacks she faced are a story all in themselves, and we owe her a debt of gratitude. [Slide-Click] We also need to thank the Canterbury Community Trust, PBT Transport and Leighs Construction for sponsorship and support, which is why their logos are on the Quakebox..



The Quake Box sets off from UC for the first time

Anyway, we did get the Quakebox on the road eventually. Given our limited resources, we decided to send it to places where damage had been the most extreme, and also to communities where people's voices weren't being heard—the poorest and most marginalised.



Our first venue to test things out and attract some attention, was the Re-Start container mall, then we headed for East Christchurch to talk to people at the Eastgate Mall in Linwood and after that to New Brighton. From there we went to the small coastal settlement of Brooklands, which had been completely red-zoned, then over the hill to Lyttelton, back to Sumner, a brief time at the 2012 A&P show, and finally to wealthier West of Christchurch to talk to people at Riccarton's Westfield Mall.



How did it work? We tried to be as low-key and non-coercive as possible. We worked closely and carefully with the UC Human Ethics Committee and UC CEISMIC Research Committee to ensure appropriate research and consent protocols are followed. People were only asked to provide as much access as they felt comfortable. The stories were recorded in high quality audio and video, and they are mostly monologues - people were prompted with 'tell me your earthquake story' then left with the video camera to do just that. The corpus in its entirety contains approximately 120 hours of recordings, with many participants treating the QuakeBox as an opportunity to speak candidly. Consistent with our impression that many people wanted to share their stories publicly, a total of 576 of the 722 stories were flagged by participants for full video release on the publicly-accessible UC CEISMIC Canterbury Earthquake Digital Archive website. The collection is a remarkable set of highly engaged and engaging stories, delivered by speakers who enthusiastically volunteered to contribute their story to the archive.

Use in Research

A tool for **linguistic** analysis

- *Investigating recency effects in spoken New Zealand English*
- **Lynn Clark, Jen Hay, Liam Walsh**

• A tool for the wider community

– **Disaster management**

- *Exploring water and waste use following a major disaster*
- *Emotional Impact of the Earthquakes on Teachers "Unsung Heroes"*

– **Applications in education**

- *Developing resources for students and teachers from the UC QuakeBox earthquake stories*



I want to mention very briefly four ways the collection has been used to support post-quake research.

- Collection of monologues – perfect for exploring within-speaker variation
- Speakers are unusually engaged in the monologues
- Ideal sociolinguistic corpus? i.e. 'danger-of-death' stories (cf Labov 1972)
- Topic of the monologues is relatively uniform = degree of control over topic is helpful (Mendoza-Denton, Hay, and Jannedy 1999, Hay & Foulkes forthcoming).
- Fully time aligned; compatible with LaBB-CAT (Fromont & Hay 2012)
- Audio + video = possibility of doing gesture research
- 800,000 words, 722 stories, ~100 hrs of speech
- Freely available:
<https://quakestudies.canterbury.ac.nz/store/collection/235>
<http://sourceforge.net/projects/labbcats/files/install/>

It's value for linguistics research:

a collection of monologues makes it easier to explore within-speaker variation, and it's an ideal sociolinguistic corpus because it's a collection of 'danger-of-death' stories (cf Labov 1972).

(3) It is also unusual in that the topic of the monologues is relatively uniform.

(4) The corpus has been fully transcribed and time-aligned in a way that allows it to be compatible with a variety of specialist tools

(5) Unlike most corpora that linguists work with, this one contains both audio and video, so it opens up the possibility of doing work on the relationship between speech and non-verbal cues

(6) At around 800,000 words, it's also large enough to be able to extract fairly large quantities of variable data

(7) And finally, did I mention, it's free!

- the video files of most of the stories can be accessed on the UC CEISMIC website

- the full corpus can be accessed from us at UC and can be installed alongside LaBB-CAT for people who want to do linguistic analysis on NZE.

Recency effects in spoken New Zealand English

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- Tendency to repeat language structures recently produced or heard when we talk (Bock & Loebell 1990; Branigan et al 2000)
- 'recency', 'persistence' or 'priming'.
- Majority of research on this has come from an experimental paradigm, with a particular focus on grammatical variation.
- Phonological priming can be thought to affect variation in natural speech has received much less attention (although see recently Clark (2014) and Tamminga (2014)).

Lynn Clark is currently using the QB to explore the extent to which phonological priming is found in speech in a project on recency effects in Spoken NZ English.

What does she mean by recency effects?

Well, when we talk, we have a tendency to repeat language structures that we have recently produced or heard and this is known as 'recency', 'persistence' or 'priming'. It shows that in cases of linguistic variation, once used, an alternative form persists in working memory and has a greater chance of reuse next time. The vast majority of research on whether, how and why speakers repeat linguistic material in quick succession has come from an experimental paradigm, with a focus on grammatical variation. The question of whether *phonological* priming can affect variation in more *natural* speech has received much less attention.

The fact that this is a corpus of monologues makes it ideal for looking for priming effects in individual speakers (because we don't have issues of accommodation to an interviewer, for example).

- Andrew Butler
andrew.butler@pg.canterbury.ac.nz
- Mining QB data to find discussions of **water & waste use post-quake**
- Exploring the role of digital infrastructure in disaster management research
- larger project on 'Post-earthquake Functioning of Cities' funded by the Ministry of Business, Innovation and Employment (MBIE), through GNS Science



Toilet in Jen Hay's back garden!



For instance, one very real consequence of the EQ was that many homes went without running water and adequate sanitation for months afterwards. Good Samaritans opened up their own homes to the public, offering water and washing facilities. The streets were lined with porta-loos; this makeshift toilet (in Jen's back garden) was not an uncommon solution for many families...

Andrew Butler is working together with a team of people from GNS science, UC and Massey University. They're working together on a project which is mining datasets contained in the CEISMIC Digital Archive, including the QuakeBox corpus, to find discussions around water and waste use by households, individuals and communities in the immediate weeks after the Christchurch earthquakes.

This project is particularly interested in using QB data because its goal is to explore the role of digital infrastructure in disaster management research. Rather than generating new datasets, the task these researchers set themselves was to find and use existing data that had been generated by multiple and diverse sources in order to create knowledge and insights, in this case specifically geared toward waste and water use following a natural disaster.

This is part of a larger project into 'Post-earthquake Functioning of Cities' (which is itself part of an even larger project - "Understanding Factors that Build Resilience in New Zealand") funded the Ministry of Business, Innovation and Employment.

- Veronica O'Toole veronica.otoole@canterbury.ac.nz
- The **emotional impact** of the Christchurch earthquakes on teachers (O'Toole 2013)

Teacher:

"You just were on adrenalin. You just had to keep going and you couldn't um....you didn't want to make the students frightened, so you couldn't look like you were frightened. That was the first thing – not to show fear, be frightened or cry"

Teacher: *"I'm exhausted, I'm angry. I was up last night until midnight looking through EQC documents and I'm arguing with them on top of my teaching role – about my home. ...I'm trying to fix one thing in my life and that might mean (no longer teaching in) the school that I love and that I'm part of I'm sick of being in a broken situation"*

Another example is the work of Veronica O'Toole who is in the department of Education at the University of Canterbury and who is studying the impact of the earthquakes on teachers, both emotionally and professionally.

Veronica uses stories from teachers who took part in the QB project, and other stories that she collected herself.

One of the aims of her work is to further our knowledge of the stress teachers experienced in the wake of these natural disasters, partly so that we can better understand how they cope with stressful situations.

Of particular interest was how the teachers dealt with their own emotions during the earthquakes. A common recurring theme in these stories is how teachers felt that they had to regulate their own emotions and reactions to a life-threatening event in order to help the children (see example).

Of course, this can lead to emotional fatigue, another theme explored by Veronica. Many teachers feel that they have had a particularly difficult time after the quakes because they are now needing to do far more emotional work with parents and students than before. Also, many of them haven't been able to take a break from work (or they feel guilty if they do). Several schools were unsafe and so have closed or merged with other schools, so they have a new workplace to adapt to; and their own personal problems in the post-quake city are pushed down the to-do list (see example. EQC = The Earthquake Commission; provides natural disaster insurance for residential property).

- Developing resources for use in the **high-school curriculum** in NZ
- Why?
 - Good pedagogy. Connecting to these events will encourage students to take a more active role in their learning because they will have their own stories to tell (<http://seniorsecondary.tki.org.nz/English>)
 - More linguistics in schools = better connections between high school and university subject areas

Finally, Lynn Clark has been working in collaboration with a high school teacher from Christchurch to develop resources for the high school curriculum in NZ based on the QB corpus.

2 reasons for this:

(1) I think it's good pedagogy. In the high school curriculum in NZ, particularly in English, there is a strong emphasis on encouraging teenagers to find and nurture a voice to tell their own stories and explore the stories of others (<http://seniorsecondary.tki.org.nz/English>).

The earthquakes that struck Canterbury in 2010-11 are among the most significant events in New Zealand history. Connecting to these events in the classroom will, we believe, encourage learners to take a more active role in learning because they will have been directly affected by these events themselves (and, of course, will all have their own earthquake stories to tell).

(2) But also I'm doing this because I want to do more to highlight areas of connection between Linguistics and the High School Curriculum. Linguistics is not offered as a stand-alone subject at school but there are clear connections to be made between Linguistics and, for example, English and Media studies. I'm hoping that by developing resources to allow the QuakeBox to be used as a teaching tool in schools, I should be able to make clearer connections between Linguistics at university and the subjects students take at high school.

▪ How?

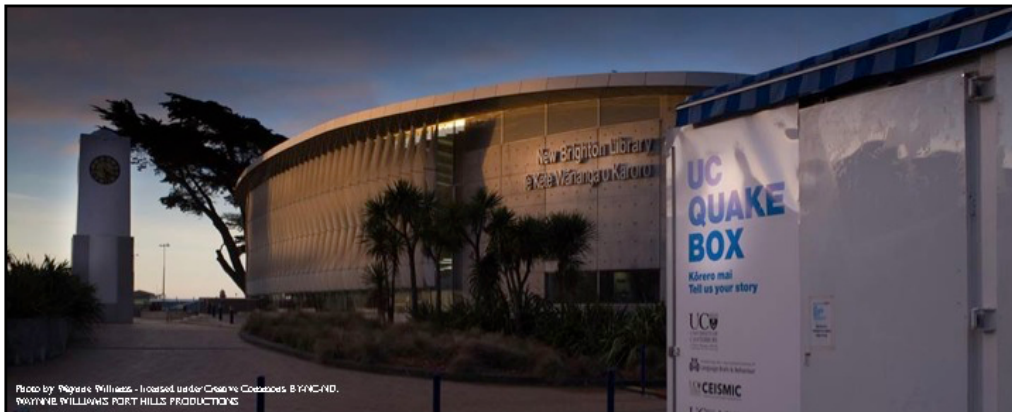
Module description	Subject area
Developing a monologue as an oral text	English or Drama
Developing a monologue as a piece of creative writing	English
Developing a social action campaign	Social studies
Developing and planning a production unit	Media studies
Research unit on language and gender in NZE	English

How?

We're in the process of developing the following 5 core modules which teachers can use in order to get their students to attain certain achievement standards in the NZ curriculum

(part of the problem with this work is that while there are lots of ways the QB could be used in interesting or innovative ways in the classroom, the modules must allow teachers to assess key criteria)

- Developing a monologue as an oral text (English or Drama)
- Developing a monologue as a piece of creative writing (English)
- Developing a social action campaign (teens being part of the rebuild process) (Social studies or English)
- Developing and planning a production unit (modelled on QB) (Media studies)
- Research unit on language and gender in NZE speech (English)



- Perhaps the most important consequence of the QuakeBox corpus
- Puts a human face on a natural disaster
- Sharing stories; sharing part of themselves
- Telling story is cathartic for many
 - *"It's part of my healing journey I think"*

This collection of stories puts a human face on the disaster.

These are real people, each telling their own unique story, one by one.

The stories help you to see the outcome of a natural disaster (any natural disaster, not just this one) not as an abstract list of facts and figures, but as an event which profoundly impacts the lives of a great many individuals.

Once participants have told their story, they are no longer strangers: by sharing their experience they are sharing part of themselves. And if you watch some of these stories in full, you can see that many of the participants seem to feel better by the end. You get the sense that for many of these people, telling their story publicly and on record is cathartic; one participant describes it as 'part of their healing journey'.



You've heard Vicki Glanville

Kirstin Golding lost her Brooklands home in the first quake.

She lost colleagues in the second quake because she was in the PCG building.

Tracey Taia became an unintended hero, hustling seven children away from a teetering building then going into it herself to try and help the shop owner

Aaron Tremaine starts off sounding like a bulletproof teen, until he got to the bit where he was desperate to leave and his grandfather gave him a lesson in resilience

And these are just four of 723 stories. We've hardly scratched the surface of what's in there.

So where to from here?

Where to from here?

- Using the Quakebox corpus as the basis for a longitudinal study of post-quake recovery

I was lying in bed asleep...



Nek Minnit...



Canterbury Quake - Christchurch NZ

September 4, 2010. 4:35am NZST

For me it is to develop the corpus into a longitudinal study. Next year it will be five years since the first interviews

We're going to analyse the corpus for common themes and issues

We're going to re-interview as many people as possible, firstly with a generalised follow-up question, followed by some questions on specific issues

We'll involve a range of disciplines—linguistics, psychology etc., and use our newly established UC Documentary Film Unit to make a film about their last five years.

If this goes well, we'll also aim to do a ten-year follow-up, now that we know just how long recovery from such experiences takes.

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